

### **REMARKS**

The present Amendment amends claims 3, 4, 6-8, leaves claims 1, 2, 5 and 9-13 unchanged and adds new claims 14-16. Therefore, the present application has pending claims 1-16.

It appears from the May 1, 2003 and December 3, 2003 Office Actions that the Examiner has not considered the March 5, 1999 Information Disclosure Statement submitted with the application. A copy of the March 5, 1999 Information Disclosure Statement is attached. An indication that the references cited therein have been considered is respectfully requested.

Claims 4-6 stand rejected under 35 USC §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regards as the invention. Various amendments were made throughout claims 4-6 to bring them into conformity with the requirements of 35 USC §112, second paragraph. Therefore, this objection is overcome and should be withdrawn.

Specifically, amendments were made throughout claims 4-6 to overcome the objections noted by the Examiner in paragraph 3 of the Office Action.

The Examiner's cooperation is respectfully requested to contact Applicants' Attorney by telephone should any further indefinite matters be discovered so that appropriate amendments may be made.

Applicants acknowledge the Examiner's indication in paragraph 7 of the Office Action that claims 9-12 are allowed.

Applicants also acknowledge the Examiner's indication in paragraph 8 of the Office Action that claims 4-6 would be allowable if rewritten or amended to overcome the rejection under 35 USC §112, second paragraph and to include all the limitations of the base claim and any intervening claims. As indicated above, amendments were made to claims 4-6 to overcome the 35 USC §112, second paragraph rejection. Also, amendments were made to claims 4-6 to place them in independent form including all the limitations of the base claim and any intervening claims. Therefore, claims 4-6 are allowable as indicated by the Examiner.

Claims 1-3, 7, 8 and 13 stand rejected under 35 USC §103(a) as being unpatentable over Irie (U.S. Patent No. 5,550,823) in view of Fichou (U.S. Patent No. 5,790,522). This rejection is traversed for the following reasons. Applicants submit that the features of the present invention as now recited in claims 1-3, 7, 8 and 13 are not taught or suggested by Irie or Fichou whether taken individually or in combination with each other as suggested by the Examiner. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

As per the Remarks of the September 2, 2003 Amendment, said Remarks being incorporated herein by reference, the present invention as recited in the claims is directed to an invention as illustrated in Figs. 1 and 2 of the present application wherein a packet switch is provided so as to be connected to a plurality of input lines IN-1 through IN-n and output lines OUT-1 through OUT-n for forwarding variable length packets received from each of said input lines to one of the output lines specified by respective header information included in each packet. The packet switch of the present invention as recited in the claims includes a switch unit 3

having a plurality of input ports LI-1 through LI-n and output port LO-1 through LO-n corresponding to the input lines and outputs lines. The switch unit outputs fixed length cells received from each of the input ports to the one of the output ports specified by routing information contained in the cell header of the received cells. The packet switch of the present invention as recited in the claims further includes a plurality of input line interfaces 1-1 through 1-n, the details of which are illustrated in Fig. 2. Each input line interface is connected to one of the input ports, converts the variable length packets received from the input line to fixed length cells, and supplies the fixed length cells to the input port of the switch unit 3.

The packet switch of the present invention also includes a plurality of output line interfaces 2-1 through 2-n each connected to one of the output ports of the switch unit 3. Each output line interface converts output cells received from the output port to variable length packets and sends the packet to one of the output lines. Each input line interface has a cell output controller 16 which stores the cells converted from the variable length packets in queues formed for each output line according to a degree of priority of respective cells and selectively forwards the stored cells to the input port according to the degree of priority of the respective cells.

The above described features of the present invention now more clearly recited in the claims are not taught or suggested by particularly Irie and Fichou whether taken individually or in combination with each other as suggested by the Examiner.

As argued in the previous response, Fichou et al. dispatches variable length input packets to the receive adapter queues, and these variable length input packets are read out in the order of priority level to the receive switch interface (RSI) by which each variable length input packet is assembled into fixed length ATM cells, thereby to switch the ATM cells to one of plural transmit adapters.

On the other hand, Irie et al, discloses an ATM switch with a plurality of input circuits (input line interfaces) in which a plurality of logical queues 22 are formed in accordance with delay quality classes and output port b of a switching unit 24 as shown in FIG. 1, so that input ATM cells are read out from the logical queue having the delay quality class which is an upper most class.

In the Office Action, the Examiner alleges that it would have been obvious to one skilled in the art to incorporate a receive adaptor and a transmit adaptor into Irie to receive variable length packets and to convert the variable length packets to fixed length cells for switching as in the present invention. However, the Examiner's allegation fails since there is no motivation for Fichou to adopt the structure of Irie. Thus, Fichou cannot be combined with Irie in the manner alleged by the Examiner. Therefore, the Examiner has not made a prima facie case of obviousness under 35 USC §103.

An important point of distinction between the present invention and the references of record is that, even if internal header or additional information is added, both Irie and Fichou teach to store input packets as they are in the input queues and to read out the packets packet-by-packet from each queue according to their priority Irie stores input packets in blocks of ATM cells into each of the logical

queues 22 because input packets are received in a form of ATM cells from each input line. Similarly, Fichou stores input packets in blocks of variable length packets into each of receive adapter queues 42 because variable length packets are received from each input line,

Neither of Irie or Fichou teach to divide an input packet into smaller sized data blocks before storing it into an input queue so that a newly arrived high priority packet can overtake a previously arrived low priority packet at the input line interface even if a part of the previously arrived low priority packet has been switched to the output line interface as in the present invention.

Thus, as is quite clear from the above, both Irie and Fichou suffer from the same deficiencies relative to the features of the present invention as recited in the claims. Therefore, combining the teachings of Irie and Fichou in the manner suggested by the Examiner in the Office Action still fails to teach or suggest the features of the present invention as recited in the claims. Accordingly, reconsideration and withdrawal of the 35 USC §103(a) rejection of claims 1-3, 7, 8 and 13 as being unpatentable over Irie in view of Fichou is respectfully requested.

The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the references utilized in the rejection of claims 1-3, 7, 8 and 13.


As indicated above, the present Amendment adds new claims 14-16. New claims 14-16 each depend from claim 3 and therefore recite the same features shown above not to be taught or suggested by Irie or Fichou whether taken individually or in combination with each other as suggested by the Examiner.

In view of the foregoing amendments and remarks, Applicants submit that claims 1-16 are in condition for allowance. Accordingly, early allowance of claims 1-16 is respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (520.36997X00).

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP



---

Carl I. Brundidge  
Registration No. 29,621

CIB/jdc  
(703) 312-6600